

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/027,777DATE: 08/08/98
TIME: 15:51:46

INPUT SET: S27964.raw

This Raw Listing contains the General
Information Section and those Sequences
containing ERRORS.

SEQUENCE LISTING

Does Not Comply
Corrected Diskette Needed

*error
throughout*

1
2
3 (1) General Information:
4
5 (i) APPLICANT: IMMER, Hansueli
6 FORSSMANN, Wolf-Georg
7 ADERMANN, Knut
8 KLESSEN, Christian
9
10 (ii) TITLE OF INVENTION: PROCESS AND INTERMEDIATE PRODUCTS FOR
11 PREPARING CARDIODILATIN FRAGMENTS AND HIGHLY PURIFIED CARDIODILATIN
12 FRAGMENTS
13
14 (iii) NUMBER OF SEQUENCES: 11
15
16 (iv) CORRESPONDENCE ADDRESS:
17 (A) ADDRESSEE: Nikaido, Marmelstein, Murray & Oram
18 (B) STREET: 655 Fifteenth Street, N.W., Suite 330
19 (C) CITY: Washington
20 (D) STATE: D.C.
21 (E) COUNTRY: USA
22 (F) ZIP: 20005-4810
23
24 (v) COMPUTER READABLE FORM:
25 (A) MEDIUM TYPE: Floppy disk
26 (B) COMPUTER: IBM PC compatible
27 (C) OPERATING SYSTEM: PC-DOS/MS-DOS
28 (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
29
30 (vi) CURRENT APPLICATION DATA:
31 (A) APPLICATION NUMBER: US 09/027,777
32 (B) FILING DATE: 23-FEB-1998
33 (C) CLASSIFICATION:
34
35 (vii) PRIOR APPLICATION DATA:
36 (A) APPLICATION NUMBER: DE 44 20 381.0
37 (B) FILING DATE: 02-JUN-1994
38
39 (vii) PRIOR APPLICATION DATA:
40 (A) APPLICATION NUMBER: DE 195 13 784.1
41 (B) FILING DATE: 10-APR-1995
42
43 (viii) ATTORNEY/AGENT INFORMATION:
44 (A) NAME: Kitts, Monica C.
45 (B) REGISTRATION NUMBER: 36,105

RAW SEQUENCE LISTING
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INPUT SET: S27964.raw

46 (C) REFERENCE/DOCKET NUMBER: P1614-8019
47
48 (ix) TELECOMMUNICATION INFORMATION:
49 (A) TELEPHONE: (202) 638-5000
50 (B) TELEFAX: (202) 368-4810
51
52

ERRORED SEQUENCES FOLLOW:

230 (2) INFORMATION FOR SEQ ID NO:7:
231
232 (i) SEQUENCE CHARACTERISTICS:
233 (A) LENGTH: 12 amino acids
234 (B) TYPE: amino acid
235 (C) STRANDEDNESS:
236 (D) TOPOLOGY: linear
237
238 (ii) MOLECULE TYPE: peptide
239
240
241 (ix) FEATURE:
242 (A) NAME/KEY: Modified-site
243 (B) LOCATION: 1
244 (D) ~~Note~~ INFORMATION: /product= "Modified by a Fmoc protecting
--> 245 group and a Pbf protecting group"
246
247 (ix) FEATURE:
248 (A) NAME/KEY: Modified-site
249 (B) LOCATION: 3
250 (D) ~~Note~~ INFORMATION: /product= "Modified by a OtBu protecting
--> 251 group"
252
253 (ix) FEATURE:
254 (A) NAME/KEY: Modified-site
255 (B) LOCATION: 4
256 (D) ~~Note~~ INFORMATION: /product= "Modified by a Pbf protecting
--> 257 group"
258
259 (ix) FEATURE:
260 (A) NAME/KEY: Modified-site
261 (B) LOCATION: 8
262 (D) ~~Note~~ INFORMATION: /product= "Modified by a Trt protecting
--> 263 group"
264
265 (ix) FEATURE:
266 (A) NAME/KEY: Modified-site
267 (B) LOCATION: 9
268 (D) ~~Note~~ INFORMATION: /product= "Modified by a tBu protecting
--> 269 group"

globally
OTHER - replace with "OTHER INFORMATION"

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270
271
272 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:
273
274 Arg Met Asp Arg Ile Gly Ala Gln Ser Gly Leu Gly
275 1 5 10
276

277 (2) INFORMATION FOR SEQ ID NO:8:

278
279 (i) SEQUENCE CHARACTERISTICS:
280 (A) LENGTH: 8 amino acids
281 (B) TYPE: amino acid
282 (C) STRANDEDNESS:
283 (D) TOPOLOGY: linear
284

285 (ii) MOLECULE TYPE: peptide
286
287

288 (ix) FEATURE:

289 (A) NAME/KEY: Modified-site

290 (B) LOCATION: 1

--> 291 (D) Note INFORMATION: /note= "Xaa is an Fmoc protecting group or
292 H"

293

294 (ix) FEATURE:

295 (A) NAME/KEY: Modified-site

296 (B) LOCATION: 2

--> 297 (D) Note INFORMATION: /product= "Modified by a Trt protecting
298 group"

299

300 (ix) FEATURE:

301 (A) NAME/KEY: Modified-site

302 (B) LOCATION: 3

--> 303 (D) Note INFORMATION: /product= "Modified by a Trt protecting
304 group"

305

306 (ix) FEATURE:

307 (A) NAME/KEY: Modified-site

308 (B) LOCATION: 4

--> 309 (D) Note INFORMATION: /product= "Modified by a tBu protecting
310 group"

311

312 (ix) FEATURE:

313 (A) NAME/KEY: Modified-site

314 (B) LOCATION: 6

--> 315 (D) Note INFORMATION: /product= "Modified by a Phf protecting
316 group"

317

318 (ix) FEATURE:

319 (A) NAME/KEY: Modified-site

320 (B) LOCATION: 7

--> 321 (D) Note INFORMATION: /product= "Modified by a tBu protecting

*Please note: "Xaa" can only
represent a single amino acid.
? also, variable length
not permitted*

RAW SEQUENCE LISTING
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INPUT SET: S27964.raw

322 group"
323
324 (ix) FEATURE:
325 (A) NAME/KEY: Modified-site
326 (B) LOCATION: 8
--> 327 (D) Note INFORMATION: /note= "Xaa is O-OH or an O-OtBu protecting
328 group"
329
330
331 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:
332
333 Xaa Cys Asn Ser Phe Arg Tyr Xaa
334 1 5
335

336 (2) INFORMATION FOR SEQ ID NO:9:
337
338 (i) SEQUENCE CHARACTERISTICS:
339 (A) LENGTH: 19 amino acids
340 (B) TYPE: amino acid
341 (C) STRANDEDNESS:
342 (D) TOPOLOGY: linear
343
344 (ii) MOLECULE TYPE: peptide
345
346
347 (ix) FEATURE:
348 (A) NAME/KEY: Modified-site
349 (B) LOCATION: 1
--> 350 (D) Note INFORMATION: /note= "Xaa is H or an Fmoc protecting
351 group"
352
353 (ix) FEATURE:
354 (A) NAME/KEY: Modified-site
355 (B) LOCATION: 2
--> 356 (D) Note INFORMATION: /product= "Modified by a Pbf protecting
357 group"
358
359 (ix) FEATURE:
360 (A) NAME/KEY: Modified-site
361 (B) LOCATION: 4
--> 362 (D) Note INFORMATION: /product= "Modified by a OtBu protecting
363 group"
364
365 (ix) FEATURE:
366 (A) NAME/KEY: Modified-site
367 (B) LOCATION: 5
--> 368 (D) Note INFORMATION: /product= "Modified by a Pbf protecting
369 group"
370
371 (ix) FEATURE:
372 (A) NAME/KEY: Modified-site
373 (B) LOCATION: 9

Xaa can only represent a single amino acid, nothing else

?

RAW SEQUENCE LISTING
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--> 374 (D) Note INFORMATION: /product= "Modified by a Trt protecting
375 group"
376
377 (ix) FEATURE:
378 (A) NAME/KEY: Modified-site
379 (B) LOCATION: 10
--> 380 (D) Note INFORMATION: /product= "Modified by a tBu protecting
381 group"
382
383 (ix) FEATURE:
384 (A) NAME/KEY: Modified-site
385 (B) LOCATION: 14
--> 386 (D) Note INFORMATION: /product= "Modified by a Trt protecting
387 group"
388
389 (ix) FEATURE:
390 (A) NAME/KEY: Modified-site
391 (B) LOCATION: 15
--> 392 (D) Note INFORMATION: /product= "Modified by a Trt protecting
393 group"
394
395 (ix) FEATURE:
396 (A) NAME/KEY: Modified-site
397 (B) LOCATION: 16
--> 398 (D) Note INFORMATION: /product= "Modified by a tBu protecting
399 group"
400
401 (ix) FEATURE:
402 (A) NAME/KEY: Modified-site
403 (B) LOCATION: 18
--> 404 (D) Note INFORMATION: /product= "Modified by a Pbf protecting
405 group"
406
407 (ix) FEATURE:
408 (A) NAME/KEY: Modified-site
409 (B) LOCATION: 19
--> 410 (D) Note INFORMATION: /product= "Modified by a tBu protecting
411 group and an OtBu protecting group"
412
413
414 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:
415
416 Xaa Arg Met Asp Arg Ile Gly Ala Gln Ser Gly Leu Gly Cys Asn Ser
417 1 5 10 15
418
419 Phe Arg Tyr
420
421

422 (2) INFORMATION FOR SEQ ID NO:10:

423

424 (i) SEQUENCE CHARACTERISTICS:

425 (A) LENGTH: 32 amino acids

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426 (B) TYPE: amino acid
427 (C) STRANDEDNESS:
428 (D) TOPOLOGY: linear
429
430 (ii) MOLECULE TYPE: peptide
431
432
433 (ix) FEATURE:
434 (A) NAME/KEY: Modified-site
435 (B) LOCATION: 1
--> 436 (D) Note INFORMATION: /product= "Modified by a Boc protecting
437 group and a tBu protecting group"
438
439
440 (ix) FEATURE:
441 (A) NAME/KEY: Modified-site
442 (B) LOCATION: 4
--> 443 (D) Note INFORMATION: /product= "Modified by a Pbf protecting
444 group"
445
446 (ix) FEATURE:
447 (A) NAME/KEY: Modified-site
448 (B) LOCATION: 5
--> 449 (D) Note INFORMATION: /product= "Modified by a tBu protecting
450 group"
451
452 (ix) FEATURE:
453 (A) NAME/KEY: Modified-site
454 (B) LOCATION: 7
--> 455 (D) Note INFORMATION: /product= "Modified by a Pbf protecting
456 group"
457
458 (ix) FEATURE:
459 (A) NAME/KEY: Modified-site
460 (B) LOCATION: 8
--> 461 (D) Note INFORMATION: /product= "Modified by a Pbf protecting
462 group"
463
464 (ix) FEATURE:
465 (A) NAME/KEY: Modified-site
466 (B) LOCATION: 9
--> 467 (D) Note INFORMATION: /product= "Modified by a Bu protecting
468 group"
469
470 (ix) FEATURE:
471 (A) NAME/KEY: Modified-site
472 (B) LOCATION: 10
--> 473 (D) Note INFORMATION: /product= "Modified by a tBu protecting
474 group"
475
476 (ix) FEATURE:
477 (A) NAME/KEY: Modified-site
478 (B) LOCATION: 11

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INPUT SET: S27964.raw

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--> 479      (D) Note INFORMATION: /product= "Modified by a Acn pr tecting
480 group"
481
482      (ix) FEATURE:
483      (A) NAME/KEY: Modified-site
484      (B) LOCATION: 15
--> 485      (D) Note INFORMATION: /product= "Modified by a Pbf protecting
486 group"
487
488      (ix) FEATURE:
489      (A) NAME/KEY: Modified-site
490      (B) LOCATION: 17
--> 491      (D) Note INFORMATION: /product= "Modified by a OtBu protecting
492 group"
493
494      (ix) FEATURE:
495      (A) NAME/KEY: Modified-site
496      (B) LOCATION: 18
--> 497      (D) Note INFORMATION: /product= "Modified by a Pbf protecting
498 group"
499
500      (ix) FEATURE:
501      (A) NAME/KEY: Modified-site
502      (B) LOCATION: 22
--> 503      (D) Note INFORMATION: /product= "Modified by a Trt protecting
504 group"
505
506      (ix) FEATURE:
507      (A) NAME/KEY: Modified-site
508      (B) LOCATION: 23
--> 509      (D) Note INFORMATION: /product= "Modified by a tBu protecting
510 group"
511
512      (ix) FEATURE:
513      (A) NAME/KEY: Modified-site
514      (B) LOCATION: 27
--> 515      (D) Note INFORMATION: /product= "Modified by a Trt protecting
516 group"
517
518      (ix) FEATURE:
519      (A) NAME/KEY: Modified-site
520      (B) LOCATION: 28
--> 521      (D) Note INFORMATION: /product= "Modified by a Trt protecting
522 group"
523
524      (ix) FEATURE:
525      (A) NAME/KEY: Modified-site
526      (B) LOCATION: 29
--> 527      (D) Note INFORMATION: /product= "Modified by a tBu protecting
528 group"
529
530      (ix) FEATURE:
531      (A) NAME/KEY: Modified-site
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RAW SEQUENCE LISTING
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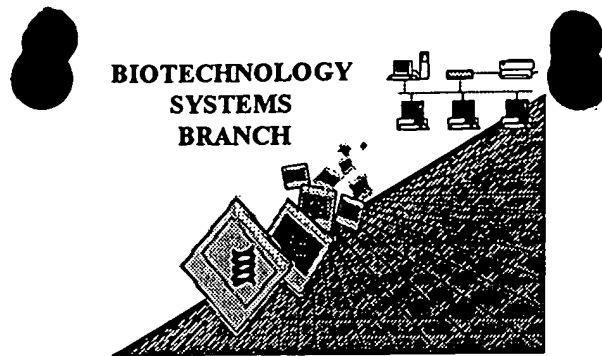
INPUT SET: S27964.raw

--> 532 (B) LOCATION: 31
533 (D) Note INFORMATION: /product= "Modified by a Pbf pr tecting
534 group"
535
536 (ix) FEATURE:
537 (A) NAME/KEY: Modified-site
538 (B) LOCATION: 32
--> 539 (D) Note INFORMATION: /product= "Modified by a tBu protecting
540 group and an OtBu protecting group"
541
542
543 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:
544
545 Thr Ala Pro Arg Ser Leu Arg Arg Ser Ser Cys Phe Gly Gly Arg Met
546 1 . 5 . 10 . 15
547
548 Asp Arg Ile Gly Ala Gln Ser Gly Leu Gly Cys Asn Ser Phe Arg Tyr
549 20 25 30
550
551

552 (2) INFORMATION FOR SEQ ID NO:11:
553
554 (i) SEQUENCE CHARACTERISTICS:
555 (A) LENGTH: 32 amino acids
556 (B) TYPE: amino acid
557 (C) STRANDEDNESS:
558 (D) TOPOLOGY: linear
559
560 (ii) MOLECULE TYPE: peptide
561
562
563 (ix) FEATURE:
564 (A) NAME/KEY: Modified-site
565 (B) LOCATION: 11
--> 566 (D) Note INFORMATION: /product= "Modified by a Acn protecting
567 group"
568
569
570 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:
571
572 Thr Ala Pro Arg Ser Leu Arg Arg Ser Ser Cys Phe Gly Gly Arg Met
573 1 5 10 15
574
575 Asp Arg Ile Gly Ala Gln Ser Gly Leu Gly Cys Asn Ser Phe Arg Thr
576 20 25 30
577
578

SEQUENCE VERIFICATION REPORT
PATENT APPLICATION US/09/027,777DATE: 08/08/98
TIME: 15:51:56*INPUT SET: S27964.raw*

Line	Error	Original Text
244	Unknown or Misplaced Identifier	(D) Note INFORMATION: /product =
250	Unknown or Misplaced Identifier	(D) Note INFORMATION: /product =
256	Unknown or Misplaced Identifier	(D) Note INFORMATION: /product =
262	Unknown or Misplaced Identifier	(D) Note INFORMATION: /product =
268	Unknown or Misplaced Identifier	(D) Note INFORMATION: /product =
291	Unknown or Misplaced Identifier	(D) Note INFORMATION: /note =
297	Unknown or Misplaced Identifier	(D) Note INFORMATION: /product =
303	Unknown or Misplaced Identifier	(D) Note INFORMATION: /product =
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315	Unknown or Misplaced Identifier	(D) Note INFORMATION: /product =
321	Unknown or Misplaced Identifier	(D) Note INFORMATION: /product =
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527	Unknown or Misplaced Identifier	(D) Note INFORMATION: /product =
533	Unknown or Misplaced Identifier	(D) Note INFORMATION: /product =
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566	Unknown or Misplaced Identifier	(D) Note INFORMATION: /product =



Notice of Availability of Checker Program

Applicant Aid for Biotechnology Computer Readable Form (CRF) Sequence Listing Submissions

The Patent and Trademark Office (PTO) has developed a computer program, called Checker, that will aid applicants in identifying and correcting errors prior to making submissions for compliance with the Requirements for Patent Applications Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures (Sequence Rules: 37CFR 1.821 through 1.825). Final rules were published in the *Federal Register* (55 FR18230) on May 1, 1990, and in the PTO *Official Gazette* (1114 Off.Gaz.PatOffice 29) on May 15, 1990.

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- 1) Dial-up access through the Internet. Location is <ftp://ftp.uspto.gov>
The software is in current directory: [pub/checker/](ftp://ftp.uspto.gov/pub/checker/)
Download all the files. Cost: Free-of-charge
- 3) For diskette copies, mail to: U.S.P.T.O., OEIP, CRYSTAL PARK 3, SUITE 441
WASHINGTON DC 20231

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PTO Deposit Account

*For Further Information, Contact: **Arti Shah at 703-308-4212***